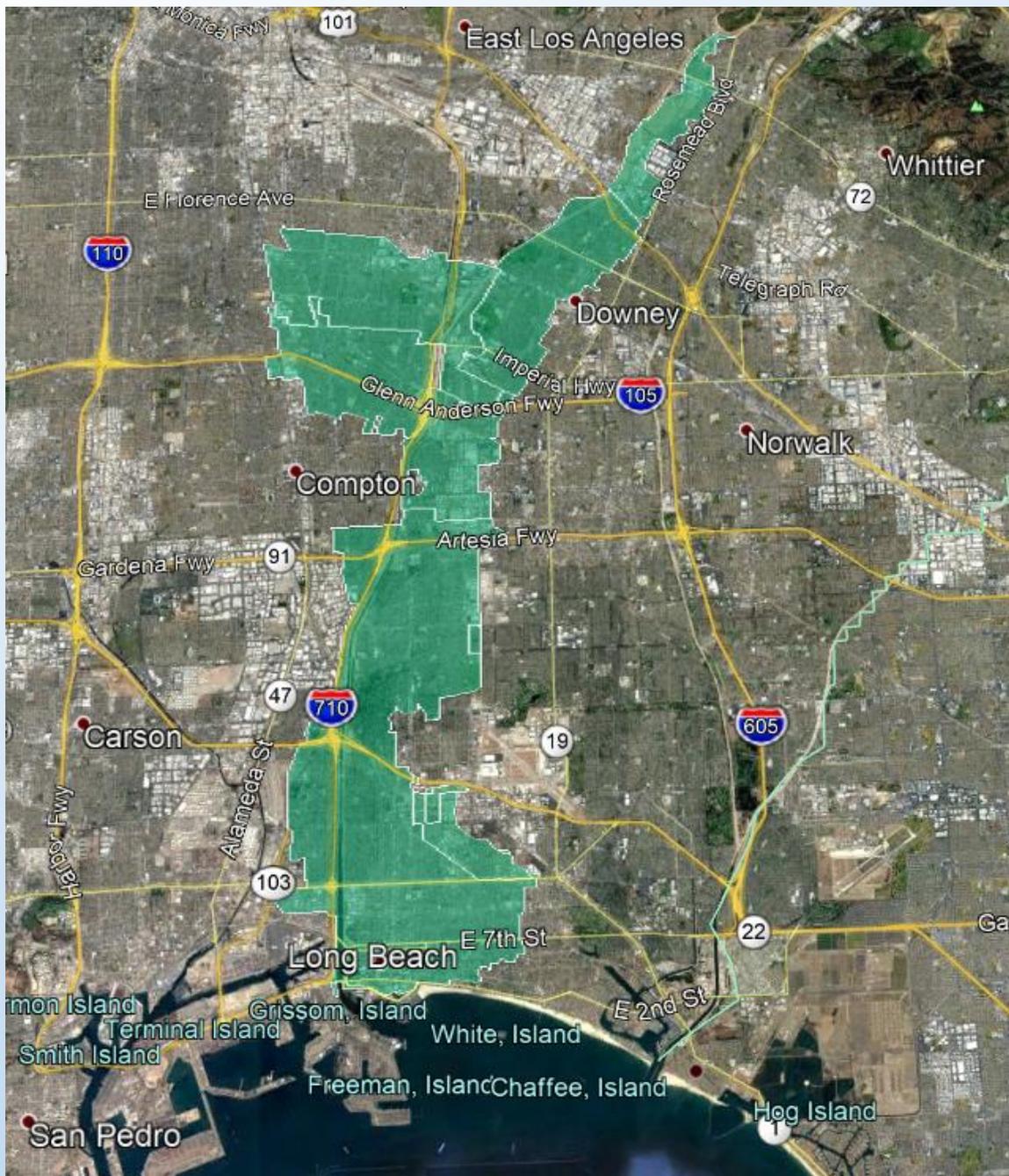


Lower Los Angeles River Watershed

May 10, 2018





Watershed Map

- Downey
- Lakewood
- Long Beach
- Lynwood
- Paramount
- Pico Rivera
- Signal Hill
- South Gate
- Los Angeles County Flood Control District

Approach

```
graph LR; A[Approach] --- B(1); A --- C(2); A --- D(3); B --- B1[11 top tier project sites identified after initial feasibility screening]; C --- C1[Stormwater merged with Strategic Transportation Plan]; D --- D1[LID required at new development sites (public and private)];
```

1

Regional Projects

- 11 top tier project sites identified after initial feasibility screening

2

Green Streets

- Stormwater merged with Strategic Transportation Plan

3

Private Developments

- LID required at new development sites (public and private)

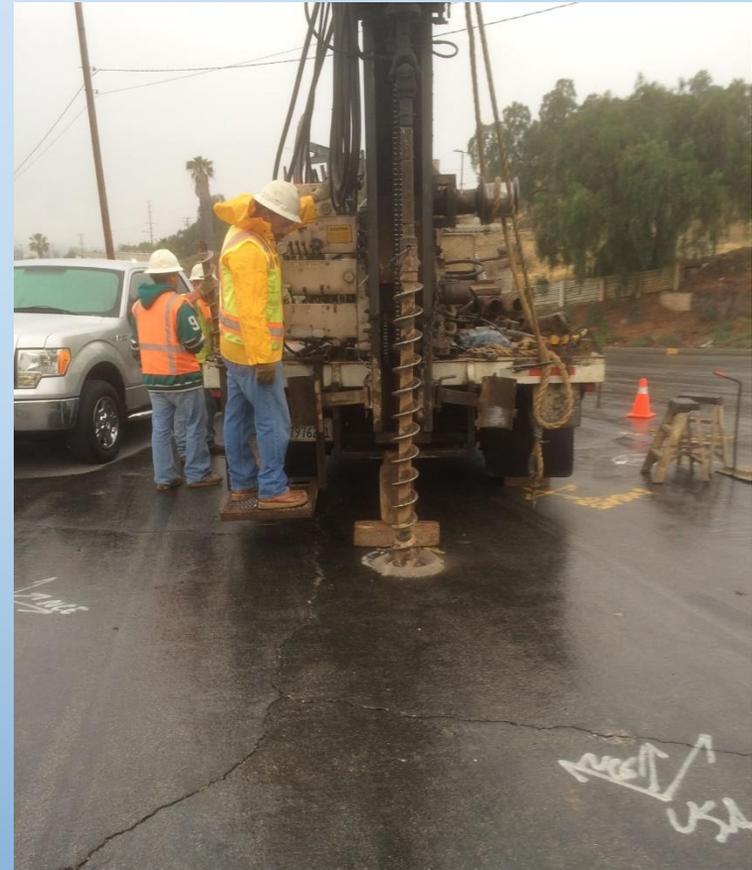
Top Tier Regional Project Sites

Project Name	Jurisdiction	Estimated Cost	Status of Funding	Drainage Area (acres)	Rate of Infiltration	DAC
Apollo Park	Downey	\$12.7 million	Funding needed	1,200	12 in/hr at 10 feet, 13 in/hr at 35 feet	Yes
DeForest Park	Long Beach	\$7.5 million	Project nearing completion	875	N/A	Yes
Dominguez Gap	Long Beach	Completed	Project previously completed	618	N/A	No
Furman Park	Downey	\$15.56 million	Funding needed	661	18 in/hr at 10 feet; 51 in/hr at 35 feet	No
Long Beach MUST	Long Beach	\$35-58 million	Awarded \$28 million in Caltrans funding and over \$2 million from additional sources	12,000	N/A	Yes
Lynwood City Park	Lynwood	\$12 million	Funding needed	1,005	1.4 in/hr	Yes
Parque dos Rios	Lynwood, South Gate	\$11.6 million	Funding needed	700	35 in/hr	Yes
Signal Hill Park	Signal Hill	\$1.5 million	Funding needed	76	10.32 in/hr	No
Spane Park	Paramount	\$9 million	Funding needed	1,000	48 in/hr at 10 feet; 1.8 in/hr at 25 feet	Yes
Urban Orchard	South Gate	Additional \$5 million sought	Awarded \$845,000 in Proposition 1 funding from the RMC, \$25,000 from the Trust for Public Land, and nearly \$8 million from the State Water Resources Control Board's Proposition 1	4,000	0.1 in/hr	Yes
View Park (Creston)	Signal Hill	\$1.5 million	Funding needed	24	6.75 in/hr	No

Testing at Potential Regional Project Sites



Percolation testing conducted at Spane Park



Drilling conducted at Creston

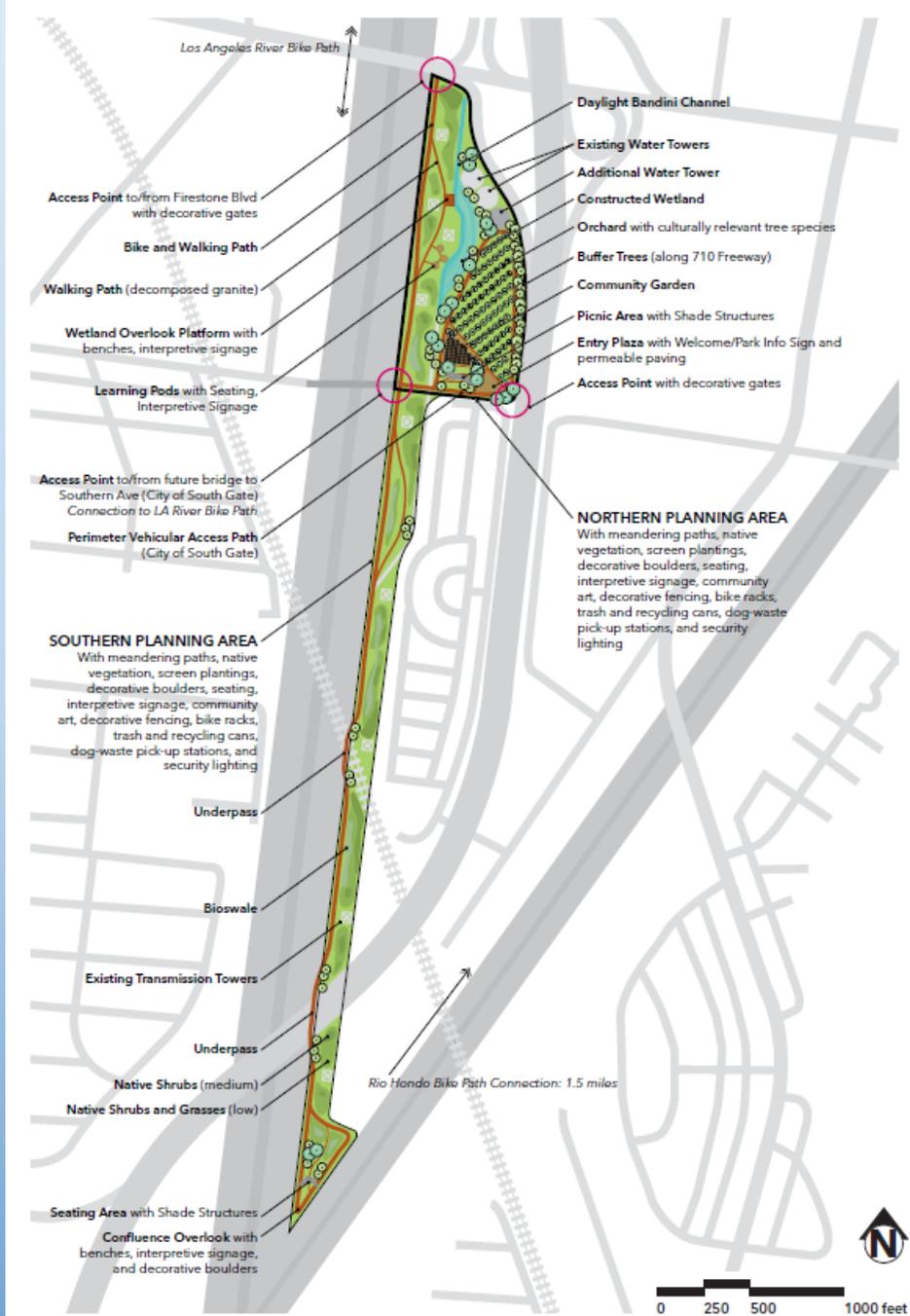


DeForest Park

- 35 acres of restoration, 4 acres of enhancement
- Filtering capacity of 800-1,000 acre-feet per year
- Infiltration of 15-35 acre-feet per year



Urban Orchard



Long Beach MUST



Green Street Examples – Soft-bottomed Tree Wells and Biofiltration Systems



Clark Street and Wright Road



Muriel Drive and Palm Avenue



Santa Fe Avenue and E 109th Street

Strategic Transportation Plan

LLAR reviewed the priority transportation corridors and identified priority locations that should be targeted for stormwater treatment



Strategic Transportation Plan Final Report

Submitted by

Cambridge Systematics, Inc.

Submitted to

Gateway Cities Council of Governments

March, 2016



LID Activities on Private Developments

An underground infiltration trench at a small site project in Signal Hill

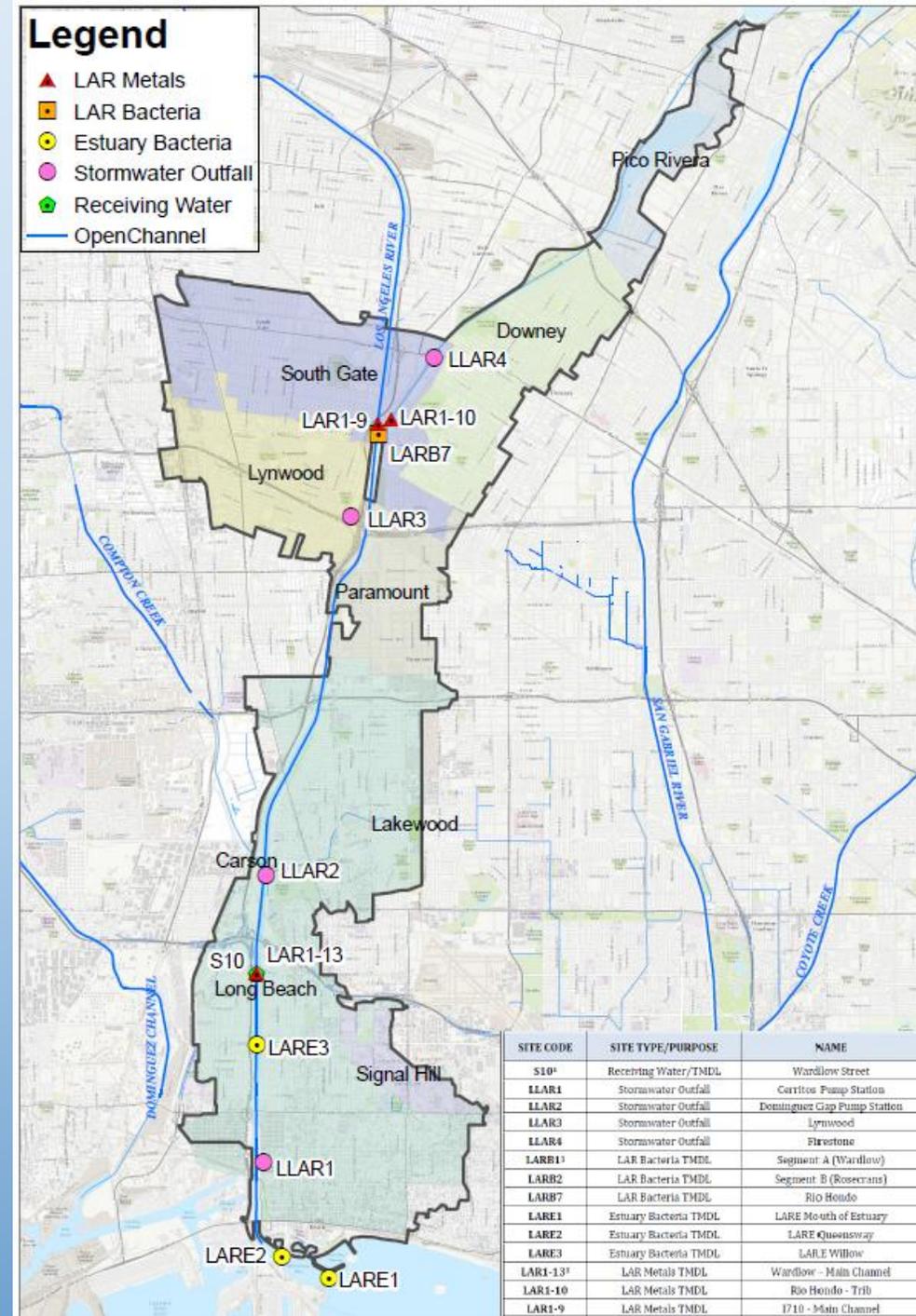
A flow-through planter box at a large site project in Signal Hill



173 stormwater projects have been installed
in the Lower Los Angeles River Watershed
since 2012.

Monitoring

- CIMP developed and approved
- Monitoring under new permit implemented from 2015
- Non-Storm Water Outfall Surveys completed
- CIMP includes one receiving water monitoring site (S10) & four outfall sites
 - Permitting delayed installation of three outfall sites to third year
- Evidence suggests that receiving water quality (S10) is generally improving
- Toxicity not found at S10 monitoring site
- Harbor Toxics TMDL addressed by ultraclean sampling (S10) and High Resolution Mass Spectral Analyses; combined effort with upstream cities



Public Outreach



Paramount Eco-Friendly Fair in 2018

Conclusions

- The LLAR is implementing the WMP and making good progress
- As many as 20 more DeForest Park/Urban Orchard/Long Beach MUST-type projects may be needed; we are running out of usable space along the river
- Funding always presents a challenge